create database assignment;

use assignment;

CREATE TABLE Ass\_3(

emp\_id int not null,

first\_name varchar(50),

last\_name varchar(50),

department varchar(20),

salary int not null,

hire\_date date);

SELECT \* FROM Ass\_3;

insert into Ass\_3(emp\_id,first\_name,last\_name,department,salary,hire\_date)

values

(1,"John","Doe","IT",60000,"2019-01-10"),

(2,"Jane","Smith","HR",55000,"2018-03-05"),

(3,"Emily","Jones","IT",62000,"2020-07-23"),

(4,"Michael","Brown","FINANCE",70000,"2016-05-14"),

(5,"Sarah","Davis","FINANCE",69000,"2017-11-18"),

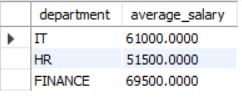
(6,"David","Johnson","HR",48000,"2021-09-10");

# Find the average salary of employees in each department.

select department, avg(salary) as average\_salary

from Ass\_3

group by department;

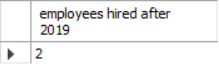


# Find the total number of employees hired after 2019.

SELECT count(hire\_date) as "employees hired after 2019"

from Ass\_3

where hire\_date >"2019-01-10";



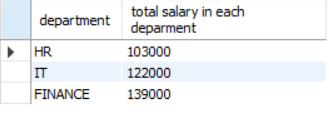
# List the departments and the total salary of all employees in each department, ordered by the total salary.

SELECT department, SUM(salary) AS "total salary in each deparment"

FROM Ass\_3

GROUP BY department

ORDER BY sum(salary) ASC;



# Find the highest salary in the Finance department.

SELECT department, MAX(salary) AS highest\_salary

FROM Ass\_3

WHERE department = "Finance";



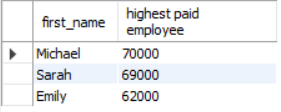
# Get the top 3 highest-paid employees.

select first\_name , max(salary) as "highest paid employee "

from Ass\_3

group by first\_name order by max(salary) desc

limit 3;



# Find the department with the minimum average salary.

SELECT department, AVG(salary) AS average\_salary

FROM Ass\_3

GROUP BY department

ORDER BY average\_salary ASC

LIMIT 1;



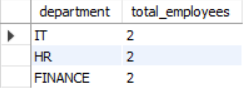
# Display the total number of employees in each department, ordered by the number of employees.

SELECT department, COUNT(\*) AS total\_employees

FROM Ass\_3

GROUP BY department

ORDER BY total\_employees DESC;



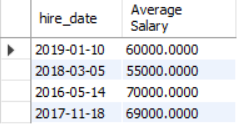
# Find the average salary of employees who were hired before 2020.

select hire\_date, avg(salary) as "Average Salary"

from Ass\_3

group by hire\_date having

hire\_date < "2020-01-01" ;



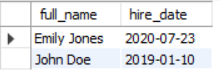
# List the names of employees in the IT department ordered by hire date, with the most recently hired employees first.

SELECT CONCAT(first\_name,' ', last\_name) AS full\_name, hire\_date

FROM Ass\_3

WHERE department = 'IT'

ORDER BY hire\_date DESC;

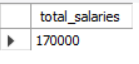


# Find the sum of salaries for all employees hired after January 1, 2019, ordered by salary.

SELECT SUM(salary) AS total\_salaries

FROM Ass\_3

WHERE hire\_date > '2019-01-01';



# Get the employee with the lowest salary in the HR department.

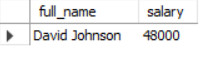
SELECT CONCAT(first\_name, ' ', last\_name) AS full\_name, salary

FROM Ass\_3

WHERE department = 'HR'

ORDER BY salary ASC

LIMIT 1;



# Find the total salary paid to employees in each department, but limit the result to the top 2 highest-paying departments.

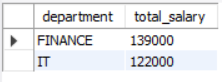
SELECT department, SUM(salary) AS total\_salary

FROM Ass\_3

GROUP BY department

ORDER BY total\_salary DESC

LIMIT 2;



# List all employees hired after 2018, ordered by salary, and show only the first 4 employees.

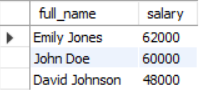
SELECT CONCAT(first\_name, ' ', last\_name) AS full\_name, salary

FROM Ass\_3

WHERE hire\_date > '2018-12-31'

ORDER BY salary DESC

LIMIT 4;



# Find the highest salary in the IT department, but limit the results to the top 1 result.

SELECT department, MAX(salary) AS highest\_salary

FROM Ass\_3

WHERE department = 'IT';



# Get the average salary of employees in each department and list only departments with an average salary greater than $60,000.

SELECT department, AVG(salary) AS average\_salary

FROM Ass\_3

GROUP BY department

HAVING average\_salary > 60000;

